

WHAT IS CLAIMED IS:

1. A bicycle pedal comprising:

a pedal shaft having a center rotational axis;

a pedal body rotatably coupled to the pedal shaft about the center rotational axis of the pedal shaft, the pedal body having a first end and a second end with a center plane extending between the first and second ends and passing through the center rotational axis of the pedal shaft;

a front clamping member coupled to the first end of the pedal body, the front clamping member having a front cleat engagement surface facing towards the center plane of the pedal body and a front cleat stop surface; and

a rear clamping member coupled to the second end of the pedal body, the rear clamping member having a rear cleat engagement surface facing towards the center plane of the pedal body and a rear cleat stop surface spaced rearwardly from the front cleat stop surface by a first predetermined distance,

the rear clamping member having an elongated tongue extending in a substantially rearward direction past the second end of the pedal body by a second predetermined distance that is at least substantially equal to or greater than the first predetermined distance.

2. The bicycle pedal according to claim 1, wherein

the elongated tongue has a generally horizontal section and a generally vertical portion that form a generally L-shape as viewed from a longitudinal side of the pedal body.

3. The bicycle pedal according to claim 2, wherein

the generally horizontal section is angled downwardly from the rear cleat engagement surface towards the center plane.

4. The bicycle pedal according to claim 1, wherein

the rear clamping member is pivotally coupled to the pedal body to move between the cleat engaged position to the cleat released position.

5. The bicycle pedal according to claim 1, wherein
the front clamping member is pivotally coupled to the first end of the pedal body to pivot in a generally forward direction through a first predetermined angle; and
a rear clamping member is pivotally coupled to the second end of the pedal body to pivot in a generally rearward direction through a second predetermined angle that is larger than the first predetermined angle,

6. The bicycle pedal according to claim 1, wherein
the front cleat stop surface is spaced forwardly from the center rotational axis of the pedal shaft by a first offset distance measured perpendicular to the front cleat stop surface; and
the rear cleat stop surface is spaced rearwardly from the center rotational axis of the pedal shaft by a second offset distance measured perpendicular to the rear cleat stop surface, the second offset distance being smaller than the first offset distance.

7. The bicycle pedal according to claim 1, wherein
the front clamping member is pivotally coupled to the first end of the pedal body about a first pivot axis to pivot in a generally forward direction with the front cleat engagement surface being radially spaced from the first pivot axis by a first lever distance; and
the rear clamping member is pivotally coupled to the second end of the pedal body about a second pivot axis to pivot in a generally rearward direction with the rear cleat engagement surface being radially spaced from the second pivot axis by a second lever distance that is larger than the first lever distance.

8. The bicycle pedal according to claim 1, wherein
the pedal body has an opposite side front clamping member coupled to the second end of the pedal body, and an opposite side rear clamping member coupled to the first end of the pedal body, the opposite side rear clamping member having an elongated tongue extending in a substantially forward direction past the first end of the pedal body by the second predetermined distance.

9. The bicycle pedal according to claim 8, wherein
the front clamping member and the opposite side rear clamping member are pivotally coupled to the first end of the pedal body about a first pivot axis; and
the rear clamping member and the opposite side front clamping member are pivotally coupled to the second end of the pedal body about a second pivot axis to pivot.

10. The bicycle pedal according to claim 9, wherein
each of the elongated tongues of the rear clamping member and the opposite side rear clamping member has a generally horizontal section and a generally vertical portion that form a generally L-shape as viewed from a longitudinal side of the pedal body.

11. The bicycle pedal according to claim 10, wherein
the opposite side front clamping member has an opposite side front cleat engagement surface facing towards the center plane of the pedal body from a second side of the center plane and an opposite side front cleat stop surface; and
the opposite side rear clamping member has an opposite side rear cleat engagement surface facing towards the center plane of the pedal body from the second side of the center plane and an opposite side rear cleat stop surface,
the front cleat engagement surface is radially spaced from the first pivot axis by a first lever distance,
the opposite side front cleat engagement surface is radially spaced from the second pivot axis by the first lever distance,
the rear cleat engagement surface is radially spaced from the second pivot axis by a second lever distance,
the opposite side rear cleat engagement surface is radially spaced from the first pivot axis by the second lever distance where the second lever distances are larger than the first lever distances.

12. The bicycle pedal according to claim 11, wherein
the front and rear cleat engagement surfaces lie substantially in a first single plane, and the opposite side front and rear cleat engagement surfaces lie substantially in a second single plane.

13. The bicycle pedal according to claim 10, wherein
the front cleat stop surface is spaced forwardly from the center rotational axis of the pedal shaft by a first offset distance measured perpendicular to the front cleat stop surface;

the opposite side front cleat stop surface is spaced from the center rotational axis of the pedal shaft by the first offset distance measured perpendicular to the opposite side front cleat stop surface;

the rear cleat stop surface is spaced rearwardly from the center rotational axis of the pedal shaft by a second offset distance measured perpendicular to the rear cleat stop surface; and

the opposite side rear cleat stop surface is spaced from the center rotational axis of the pedal shaft by the second offset distance measured perpendicular to the opposite side rear cleat stop surface, the second offset distances being smaller than the first offset distances.

14. A bicycle pedal comprising:

a pedal shaft having a center rotational axis;

a pedal body rotatably coupled to the pedal shaft about the center rotational axis of the pedal shaft, the pedal body having a first end and a second end with a center plane extending between the first and second ends and passing through the center rotational axis of the pedal shaft;

a front clamping member pivotally coupled to the first end of the pedal body about a first pivot axis to pivot in a generally forward direction through a first predetermined angle, the front clamping member having a front cleat engagement surface facing towards the center plane of the pedal body from a first side of the center plane and a front cleat stop surface; and

a rear clamping member pivotally coupled to the second end of the pedal body about a second pivot axis to pivot in a generally rearward direction through a second predetermined angle that is larger than the first predetermined angle, the rear clamping member having a rear cleat engagement surface facing towards the center plane of the pedal body from the first side of the center plane and a rear cleat stop surface.

15. The bicycle pedal according to claim 14, wherein
the front cleat engagement surface is radially spaced from the first pivot axis
by a first lever distance; and
the front and rear cleat engagement surface is radially spaced from the second
pivot axis by a second lever distance that is larger than the first lever distance.

16. The bicycle pedal according to claim 15, wherein
the front and rear cleat engagement surfaces lie substantially in a single plane.

17. The bicycle pedal according to claim 16, wherein
the front cleat stop surface is spaced forwardly from the center rotational axis
of the pedal shaft by a first offset distance measured perpendicular to the front cleat
stop surface; and
the rear cleat stop surface is spaced rearwardly from the center rotational axis
of the pedal shaft by a second offset distance measured perpendicular to the rear cleat
stop surface, the second offset distance being smaller than the first offset distance.

18. The bicycle pedal according to claim 14, wherein
the front cleat stop surface is spaced forwardly from the center rotational axis
of the pedal shaft by a first offset distance measured perpendicular to the front cleat
stop surface; and
the rear cleat stop surface is spaced rearwardly from the center rotational axis
of the pedal shaft by a second offset distance measured perpendicular to the rear cleat
stop surface, the second offset distance being smaller than the first offset distance.

19. The bicycle pedal according to claim 14, wherein
the pedal body has a first biasing member operatively coupled between the
front clamping member and the pedal body to urge the front clamping member to a
front cleat engaging position, and
the pedal body has a second biasing member operatively coupled between the
rear clamping member and the pedal body to urge the rear clamping member to a rear
cleat engaging position.

20. The bicycle pedal according to claim 14, wherein
the pedal body has an opposite side front clamping member pivotally coupled to the second end of the pedal body about the second pivot axis, and an opposite side rear clamping member pivotally coupled to the first end of the pedal body about the first pivot axis.

21. The bicycle pedal according to claim 20, wherein
the opposite side front clamping member is pivotally coupled to the second end of the pedal body to pivot through a smaller angle than the opposite side rear clamping member.

22. The bicycle pedal according to claim 21, wherein
the pedal body has a first biasing member coupled between the front clamping member and the opposite side rear clamping member to urge the front clamping member and the opposite side rear clamping member to cleat engaging positions, and
the pedal body has a second biasing member operatively coupled between the rear clamping member and the opposite side front clamping member to urge the rear clamping member and the opposite side front clamping member to cleat engaging positions.

23. The bicycle pedal according to claim 22, wherein
the first biasing member includes at least one first torsion spring with a coiled portion located on a first pivot pin, a first end of the first torsion spring contacting the front clamping member and a second end of the first torsion spring contacting the opposite side rear clamping member, and

the second biasing member includes at least one second torsion spring with a coiled portion located on a second pivot pin, a first end of the second torsion spring contacting the rear clamping member and a second end of the second torsion spring contacting the opposite side front clamping member.

24. The bicycle pedal according to claim 23, wherein
the first pivot pin pivotally couples the front clamping member and the opposite side rear clamping member to the pedal body, and

the second pivot pin pivotally couples the rear clamping member and the opposite side front clamping member to the pedal body.

25. The bicycle pedal according to claim 24, wherein
the opposite side front clamping member has an opposite side front cleat engagement surface facing towards the center plane of the pedal body from a second side of the center plane and an opposite side front cleat stop surface; and
the opposite side rear clamping member has an opposite side rear cleat engagement surface facing towards the center plane of the pedal body from the second side of the center plane and an opposite side rear cleat stop surface,
the front cleat engagement surface is radially spaced from the first pivot axis by a first lever distance,
the opposite side front cleat engagement surface is radially spaced from the second pivot axis by the first lever distance,
the rear cleat engagement surface is radially spaced from the second pivot axis by a second lever distance,
the opposite side rear cleat engagement surface is radially spaced from the first pivot axis by the second lever distance where the second lever distances are larger than the first lever distances.

26. The bicycle pedal according to claim 25, wherein
the front and rear cleat engagement surfaces lie substantially in a first single plane, and the opposite side front and rear cleat engagement surfaces lie substantially in a second single plane.

27. The bicycle pedal according to claim 26, wherein
the front cleat stop surface is spaced forwardly from the center rotational axis of the pedal shaft by a first offset distance measured perpendicular to the front cleat stop surface;
the opposite side front cleat stop surface is spaced from the center rotational axis of the pedal shaft by the first offset distance measured perpendicular to the opposite side front cleat stop surface;

the rear cleat stop surface is spaced rearwardly from the center rotational axis of the pedal shaft by a second offset distance measured perpendicular to the rear cleat stop surface; and

the opposite side rear cleat stop surface is spaced from the center rotational axis of the pedal shaft by the second offset distance measured perpendicular to the opposite side rear cleat stop surface, the second offset distances being smaller than the first offset distances.